JOHN & BOB'S

APPLICATION INSTRUCTIONS

Our products will work almost any way they are applied, but below are some specifics to help you get the best and most cost-effective results! All dry products are activated by water; apply and then water as normal.

WHAT IS IT?

Optimize is concentrated humus, We prefer a topical application calcium, and iron that creates an incorporated no more than 1 to 2 organic soil conditioner. Our humus is fully decomposed and mined from organic deposits deep below the earth's surface that have been composting for thousands of years. Optimize attracts zillions of beneficial soil microorganisms that improve everything about your soil. Other soil conditioners require years breakdown in the soil to approach the benefits of Optimize.

HOW TO APPLY

inches below top of grade. You can apply right over the top of mulch or existing landscapes. It will work faster if applied under a mulch layer. Apply by hand or with a whirlybird spreader at a 2 or 3 drop setting. Will not burn.

SMALL PLANTS & STARTERS	SMALL TREES & SHRUBS		PER 180 SQ FT
1/8 CUP	1/4 CUP	1/2 CUP	1 CUP

HOW DOES IT WORK?

Optimize is food for beneficial microorganisms. These organisms are essential for plant life because of their ability to break down fertilizer and make nutrients available to the plant's root system. Humus (humic acid) coats large and small soil particles separating the particles, enhancing aeration and water penetration. Since Optimize is already decomposed, the soil particles will become permanently coated, never returning to their original consistency.



Maximize is made up of concentrated minerals and live microbes. It contains almost every mineral nutrient that occurs naturally in soil and higher level (bacteria, fungi, and protozoa) that digest thatch and dead leaves. Maximize includes mycorrhizae fungi to aid in nutrition, disease suppression, and stimulation of root growth. More than NPK, the most important determinant of healthy soil is the presence of complex soil life fed by

HOW TO APPLY

Incorporate slightly in the top 1 to 2 inches of soil. If possible, apply some of the Maximize right next to plant roots (mycorrhizae lives on roots). Mix with Optimize and Nourish-Biosol if you want to spread with a whirlybird spreader, Maximize alone is too fine.

PLANTS &	SMALL TREES & SHRUBS	TREES &	PER 180 SQ FT
3/8 CUP	3/4 CUP	1 & 1/2 CUPS	3 CUPS

HOW DOES IT WO

Maximize creates food for the benefical microbes that feed plants by introducing higher level microbes that digest thatch and dead leaves. It inoculates soils with complex forms of beneficial microbes which are the key to healthy soil. Maximize reacts well with any organic fertilizer, allowing the soil to work quickly and more efficiently to release nutrients to plant roots. Together, Maximize and Optimize are great to rejuvenate old planters or

WHAT IS IT?

Nourish-Biosol is an all-natural fertilizer made from the bloom of cultured soybean meal and cottonseed meal. The bloom, called mycelium, is already decomposed and provides immediate results when applied to your soil. Most other organic nutrients must decompose further before plants can absorb them. Nourish-Biosol works quickly to feed all types of plants and lawns while simultaneously building the soil. No animal products & Non-GMO.

HOW TO APPLY

Apply topically or slightly incorporate in the top 1 to 2 inches of soil. Can be applied with a whirlybird spreader at a 2 or 3 drop setting. For faster results, thoroughly wet the soil application. Will not burn or stain!

SMALL PLANTS & STARTERS		LARGE TREES & SHRUBS	PER 180 SQ FT
1/4 CUP	1/2 CUP	1 CUP	2 CUPS

HOW DOES IT WORK?

Nourish-Biosol is completely vegetable based with high nutrient values that are fast-acting and long-lasting. It does not result in nitrogen spikes and will not damage or degrade soil the way traditional fertilizers can. Nourishreduces pH and concentrations in soil, minimizes fungal diseases in turf and gardens, and feeds beneficial soil bacteria. It is completely safe for pets and children.



WHAT IS IT?

Penetrate is a soil penetrant that breaks up the hardest clay or compacted soil. It is also great for sandy soil because it kick starts the development of complex soil life. Penetrate contains beneficial aerobic bacteria in one bottle and food for the bacteria in another (both in the same box). The bacteria in **Penetrate** is the same bacteria in organic fungicides. It will help suppress the same diseases and insect pressures in soil and on plants or lawns.

HOW TO APPLY

Mix 8oz Penetrate with at least 1 gallon of water in a bucket or sprayer of any kind. If needed, add more water to make application easier. Make sure at least a light application gets to areas you want to improve. You do not need to drench your soil. If possible, apply Penetrate last and allow to rest for a few days after application. This helps prevent damage to the live bacteria. Penetrate can also be sprayed on plant foliage to combat pests and disease.

HOW DOES IT WORK?

We want the amazing benefits of microbes feeding on their favorite nourishment to occur in your soil so the bacteria and food for bacteria are kept separate until application. An army of bacteria quickly grow when applied and they accelerate the soil loosening process by breaking down nutrients for plant use. Penetrate allows air and moisture to circulate to plant roots, improving drainage and transforming hard soil into crumbly and easy to work with soil.

WHAT IS IT?

Blend is a proportional mix of Apply topically or slightly incorporate Biosol. If mixing at home, use the ratio of 1 part Optimize, 2 parts Nourish-Biosol, and 3 parts Maximize. After about 2 months Blend will develop a harmless mold, a result of live microbes reacting to food. We want this to happen in the soil, not the bag. If mold does develop, break it up and incorporate with product before applying.

HOW TO APPLY

Optimize, Maximize, and Nourish- in the top 1 to 2 inches of soil. Can be applied with a whirlybird spreader at a 2 or 3 drop setting.

SMALL PLANTS & STARTERS			PER 180 SQ FT
1 CUP	1 & 1/2 CUPS	3 CUPS	6 CUPS



SANDY SOIL KIT

- Apply Optimze (3lbs per 1,000 sq ft),
 Maximize (8lbs per 1,000 sq ft), and
 Nourish-Biosol (6lbs per 1,000 sq ft).
 You can premix dry products and apply all together.
- 4 weeks later, do a second application of Nourish-Biosol (6lbs per 1,000 sq ft).

LIFELESS SOIL & NATURE'S GARDENING KIT

Apply Optimze (3lbs per 1,000 sq ft), Maximize (8lbs per 1,000 sq ft), Nourish-Biosol (6lbs per 1,000 sq ft), and Penetrate (8oz per 1,000 sq ft mixed with at least 1 gallon of water). Apply Penetrate last. You can premix dry products and apply all together.

Apply products every 6 months.

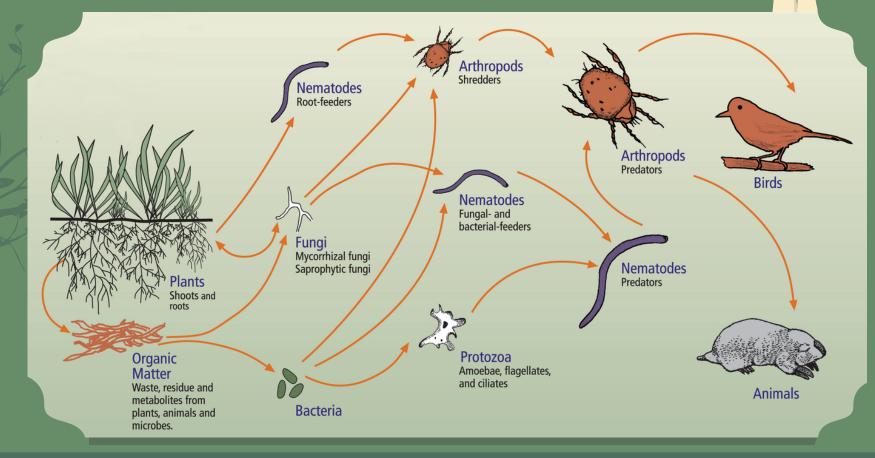
CLAY & HARD SOIL KIT

- Divide Penetrate so you can make 4 equal applications. Use Penetrate at 8oz per 1,000 sq ft mixed with at least 1 gallon of water. Do 3 separate applications, 2 to 10 days apart, based on your convenience.
- Apply Optimze (3lbs per 1,000 sq ft),
 Maximize (8lbs per 1,000 sq ft),
 Nourish-Biosol (6lbs per 1,000 sq ft),
 and 4th application of Penetrate. Apply
 dry products every 6 months.

THE SOIL FOOD WEB

The only way to physically improve poor soil is by tapping into the power of nature through the Soil Food Web. The Soil Food Web explains the complex interactions that occur in and around the soil, from microscopic bacteria to birds and butterflies. We have the power to encourage these organisms to thrive and interconnect, and that is where the true soil-changing power lies. John & Bob's products infuse the soil with beneficial bacteria, minerals, organic nutrients, fungi and protozoa, promoting a healthy and active Soil Food Web.

Plants that grow in living soil have fewer diseases, healthier growth, better food production, and stronger root systems. Controlling pests is also directly connected to soil quality and a rich biodiversity of microbial life in the soil. 75% of all insect pests spend part of their life cycle in the soil and many of their natural enemies occur there as well, as long as the soil is rich with complex soil life. If your soil is healthy then pests are eliminated before they ever become an issue. All of these benefits are achieved without damaging the environment and without any fear of compromising the health of yourself, your children, or your pets!



<u>Lower Life Forms:</u>

Beneficial fungi and bacteria. They break down dead organic matter and keep harmful pathogens out of the soil.

<u>Higher Microbes:</u>

Beneficial nematodes and protozoa. They eat lower life forms, releasing usable nutrients to plant roots.

Larger Organisms:

Arthropods and earthworms. They aid in decomposition and aeration.

Birds and Mammals:

They aerate the soil by eating arthropods to control populations and by adding their own manure to organic matter in the soil. They also help transport mycorrhizal and other fungi spores through burrowing and scratching around the soil.

SIZE & COVERAGE RATES

*COVERAGE RATES ARE RECOMMENDATIONS FOR BEST VALUE. YOU CAN USE MORE PRODUCT FOR MORE TROUBLESOME SOIL.
THE CUPS AVAILABLE IN EACH BAG OF PRODUCT ARE APPROXIMATIONS*

OPTIMIZE

3 LB BAG= 5 CUPS / 1,000 SQ FT **6 LB BAG**= 10 CUPS / 2,000 SQ FT **12 LB BAG**= 20 CUPS / 4,000 SQ FT **42 LB BAG**= 70 CUPS / 14,000 SQ FT

MAXIMIZE

8 LB BAG= 15 CUPS / 1,000 SQ FT **32 LB BAG**= 60 CUPS / 4,000 SQ FT

NOURISH BIOSOL

6 LB BAG= 10 CUPS / 1,000 SQ FT 24 LB BAG= 40 CUPS / 4,000 SQ FT 50 LB BAG= 85 CUPS / 8,000 SQ FT

PENETRATE

8 OZ= 1,000 SQ FT **32 OZ**= 4,000 SQ FT

BLEND

6 LB BAG= 12 CUPS / 350 SQ FT 40 LB BAG= 80 CUPS / 2,500 SQ FT

CONTAINERS & RAISED BEDS

DOUBLE THE RATES LISTED FOR EACH DRY PRODUCTFOR EXAMPLE: A ROSE IN A CONTAINER = 3 CUPS OF BLEND

